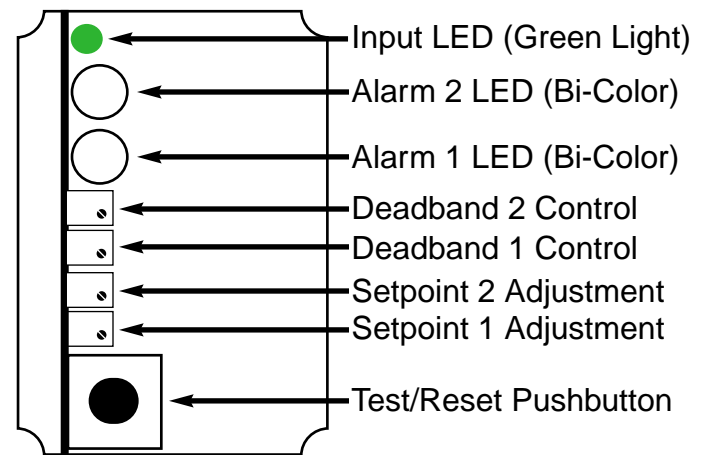


API 1080G



API 1090G

Description of Controls

The following descriptions are for both the API 1080G and 1090G. For the API 1090G Dc Dual Alarm, the controls listed below function exactly the same for each set of alarm contacts. If you encounter any difficulty in adjusting the controls or achieving the proper indications, please contact our Technical Support Department at (800) 942-0315.

Input LED. This GREEN Light provides a visual indication that a signal is being sensed by the input circuitry of the module. It also indicates the input signal strength by changing in intensity as the process changes from minimum to maximum. Note: If the LED fails to illuminate, or fails to change in intensity as the process changes, this may indicate a problem with module power or Signal Input Wiring.

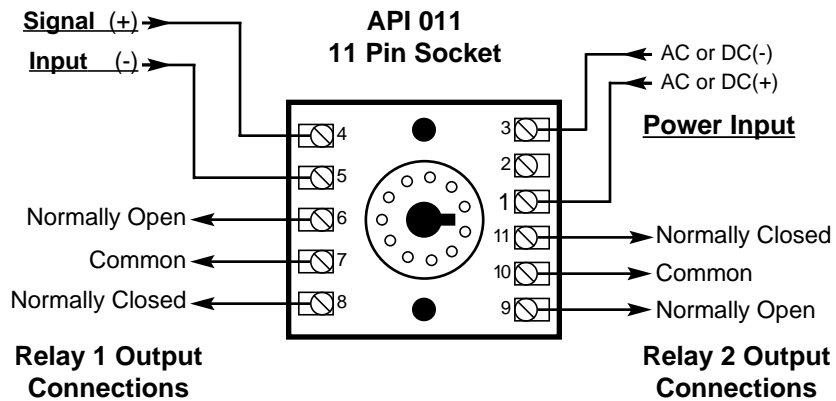
Alarm LED. This Bi-Color LED provides a visual indication of the Alarm Status. In all configurations, a GREEN LED indicates a Non-Alarm condition and a RED LED indicates an Alarm Condition. In the Normal Mode of operation (Failsafe), the relay coil is energized in a Non-Alarm condition and de-energized in an Alarm condition. If Reverse Sense Mode is selected (Non-Failsafe), the relay coil is de-energized in a Non-Alarm condition and energized in an Alarm condition.

Deadband Control. This Multi-turn potentiometer allows the operator to “fine tune” the point in which the alarm trips (alarm condition) and resets (non alarm condition). The Deadband is symmetrical about the setpoint and is typically used to prevent chattering of the relays or false trips when the process signal is unstable or changes rapidly.

Setpoint Control. This multi-turn potentiometer allows the operator to adjust the level which the alarm is activated. This control is adjustable from 0 to 100% of the Input Range.

Test/Reset Pushbutton. This Pushbutton Control serves a dual purpose. When the unit is set for a non latching alarm, the Test Pushbutton allows the alarm relay contacts to be toggled independent of the input signal. When the unit is set for a Latching Alarm, the alarm relay contacts will remain in the Alarmed condition until the input signal falls below the setpoint and the unit has been reset by pressing the Test/Reset Pushbutton.

Electrical Connection



All of us at Absolute Process Instruments place the highest importance on Electrical Safety. To ensure the safety of our customers and their satisfaction with our products, we suggest that all wiring be performed by qualified personnel only. The Electrical Connections are referenced to an Industry standard 11-pin octal socket.

Power Input Terminals. Terminals 1 and 3 are wired with the desired AC or DC Power. The white label on the side of your API unit will have the power requirements listed as specified on your purchase order.

Signal Input Terminals. Terminals 4 and 5 provide connection for the appropriate Input Signal.

Relay Output Terminals. Terminals 6,7,8 and 9,10,11 provide the appropriate connections for the desired relay operations. (Normally Open or Normally Closed)

NOTE: Although the API 1080G has a pair of relays, these relays will energize and de-energize in unison. The API 1090G will accommodate independent relay operations.

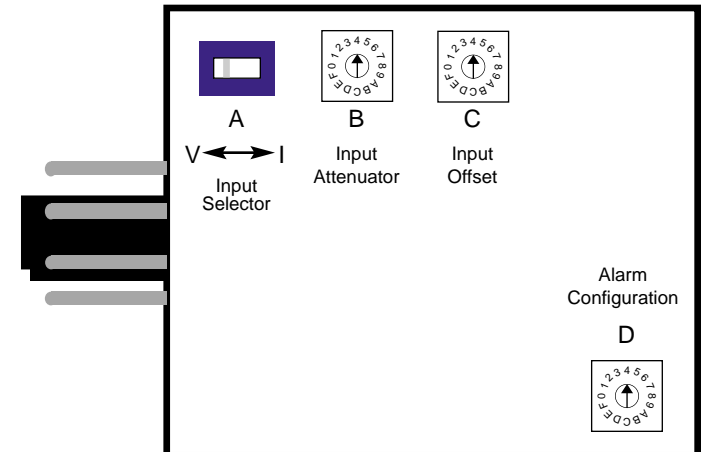
Ranging Switches

Located on the side of your API unit are three rotary switches and one slide switch. These are used to select your desired Input Range and Alarm Configuration. There is NEVER a need to open the case. In addition, the module contains Range Tables and Labels designed to assist you in ranging your module.

1. **Input Selector Slide Switch.** This slide switch will allow the operator to select either a Voltage or Current Input. **Example:** If a Current Input is required, the Input Select switch would be placed in the "I" position. If a Voltage Input would be needed, the Input Select switch would be placed in the "V" position.

2. **Rotary Range Selector Switches** These switches will provide the selected amount of amplification or attenuation to accomplish the desired range. **Example:** We will set the switches on an API 1090G for a 4-20 mA DC input and a HI/LO, normal acting, non-latching alarm. Set the Input selector slide switch to the "I" position. Locate the desired range from the chart on the side of the unit. Our desired switch code is "5F6". Now rotate switch **B** (Input Attenuator) to the **5** position, switch **C** (Input Offset) to the **F** position and switch **D** (Alarm Configuration) to the **6** position. The ranging process is now complete and the unit is ready for final Calibration and Installation.

Range Selection Switches



Absolute Process Instruments

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Visit us on the the World Wide Web at [http:// www.api-usa.com](http://www.api-usa.com) E-Mail us at support@api-usa.com